Page 1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L3 4 ANSWERS REGISTRY COPYRIGHT 1999 ACS
IN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-phenyl- (9CI)
MF C11 H6 Br2 N4

L3 4 ANSWERS REGISTRY COPYRIGHT 1999 ACS IN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-chloro-6-fluorophenyl)- (9CI)
MF C11 H4 C13 F N4

L3 4 ANSWERS REGISTRY COPYRIGHT 1999 ACS IN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(2-chloro-6-fluorophenyl)- (9CI)
MF C11 H4 Br2 C1 F N4

ALL ANSWERS HAVE BEEN SCANNED

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

2.52 SESSION 3.78

FILE 'STNGUIDE' ENTERED AT 11:36:03 ON 22 OCT 1999
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 1999 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Oct 15, 1999 (19991015/UP).

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION 1.26 5.04

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:48:29 ON 22 OCT 1999 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 1999 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 21 OCT 99 HIGHEST RN 244795-03-7 DICTIONARY FILE UPDATES: 21 OCT 99 HIGHEST RN 244795-03-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

Please note that search-term pricing does apply when conducting SmartSELECT searches.

=> d his

(FILE 'HOME' ENTERED AT 11:28:18 ON 22 OCT 1999)

FILE 'REGISTRY' ENTERED AT 11:31:57 ON 22 OCT 1999

L1 STRUCTURE UPLOADED

L2 QUE L1

L3 4 S L1

FILE 'STNGUIDE' ENTERED AT 11:36:03 ON 22 OCT 1999

FILE 'REGISTRY' ENTERED AT 11:48:29 ON 22 OCT 1999

=> s l1 full

FULL SEARCH INITIATED 11:49:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 8514 TO ITERATE
100.0% PROCESSED 8514 ITERATIONS

49 ANSWERS

SEARCH TIME: 00.00.01

L4 49 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 120.72 125.76

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:49:40 ON 22 OCT 1999
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 1999 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1967 - 22 Oct 1999 VOL 131 ISS 17 FILE LAST UPDATED: 21 Oct 1999 (19991021/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 14

L5 12 L4

=> d 15 bib abs hitstr 1-12

```
L5 ANSWER 1 OF 12 CAPLUS COPYRIGHT 1999 ACS
```

AN 1999:626195 CAPLUS

DN 131:228731

TI Preparation of 6-(2-halo-4-alkoxyphenyl-triazolopyrimidines as agrochemical fungicides.

IN Pfrengle, Waldemar

PA American Cyanamid Company, USA

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

FAN.CNI Z																		
	PA	rent	NO.		KI	ND	DATE			A	PPLI	CATI	ои ис	ο.	DATE			
ΡI	WO	9948893		A1 19990930		WO 1999-US5915			5	19990319								
		W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,
			KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,
			MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,
			TT,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,
TM																		
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
			ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
			CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG					
	WO 9846608		A1 19981022			WO 1998-US5615			5	19980323								
		W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	ΚE,	KG,

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG 19980323 PRAI WO 1998-US5615 US 1998-160899 19980925 US 1997-843323 19970414 US 1998-150572 19980910

GΙ

Title compds. [I; R1, R2 = H, (substituted) alkyl, alkenyl, alkynyl, AΒ alkadienyl, haloalkyl, aryl, heteroaryl, cycloalkyl, bicycloalkyl, heterocyclyl; R1R2N = (substituted) heterocyclyl; R3 = alkyl, alkenyl, alkynyl, phenylalkyl, alkoxyalkyl, polyalkoxyalkyl, Ph, haloalkyl; L1 =

Η,

IT

F, C1; L2 = F, C1; X = halo], were prepd. Thus, 4-methylpiperidine, Et3N, and 5,7-dichloro-(2,6-difluoro-4-methoxyphenyl)-1,2,4-triazolo[1,5a]pyrimidine (prepn. given) were stirred 16 h to give 5-chloro-(2,6difluoro-4-methoxyphenyl)-7-(4-methylpiperid-1-yl)-1,2,4-triazolo[1,5-

a)pyrimidine. The latter showed a min. inhibitory concn. of <0.05 .mu.g/mL against Alternaria solani.

244092-41-9P

Ι

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of 6-(2-halo-4-alkoxyphenyl-triazolopyrimidines as agrochem. fungicides)

244092-41-9 CAPLUS RN

CN INDEX NAME NOT YET ASSIGNED

ANSWER 2 OF 12 CAPLUS COPYRIGHT 1999 ACS L5

AN 1999:571812 CAPLUS

131:181114 DN

Preparation of fungicidal trifluoromethylalkylaminotriazolopyrimidine ΤI derivatives.

Pees, Klaus-Juergen; Krummel, Guenter; Cotter, Henry Van Tuyl; Albert, IN Guido; Rehnig, Annerose; May, Leslie; Pfrengle, Waldemar

American Cyanamid Company, USA PA

SO U.S., 10 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT N	NO. KIND	DATE	APPLICATION NO.	DATE
PI US 59487	783 A	19990907	US 1998-54580	19980403
PRAI US 1997-	-43820 19970	414		
OS MARPAT 1	31:181114			

GI

L5

1999:529149 AN CAPLUS DN 131:170358 ΤI Preparation of 7-alkyltriazolopyrimidines as selective agrochemical fungicides IN Pfrengle, Waldemar; Pees, Klaus-Juergen; Albert, Guido PA American Cyanamid Company, USA SO PCT Int. Appl., 37 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE 19990209 PΙ WO 9941255 19990819 WO 1999-US2808 A1 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

ANSWER 3 OF 12 CAPLUS COPYRIGHT 1999 ACS

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1998-22288 19980211 US 1999-243851 19990203

OS MARPAT 131:170358

GI

25

$$\begin{array}{c|c}
L1 & L2 \\
\hline
 & L3 \\
\hline
 & L4 \\
\hline
 & L5 \\
\hline
 & L4
\end{array}$$

AB The title compds. [I; R1 = (un)substituted alk(en)yl, alkynyl, alkadienyl,

aryl, or cycloalk(en)yl in which 1 CH2 group may be replaced by O, S or
NR2; R2 = H, alkyl; X = H, halo, OH, (halo)alkoxy, aryloxy, cyano, amino,
etc.; L1-L5 = H, halo, (un)substituted alkyl, (un)substituted alkoxy,
NO2,

cyano] were prepd. The new compds. are processed with carriers and, optionally, adjuvants, to afford fungicidal compns., useful in agricultural applications. For example, suspending 0.96 g Cu iodide in

mL THF under inert atm., cooling the suspension to -70.degree., adding 5 mL of n-hexyllithium soln. (2 M, in hexanes), stirring the mixt. for 45 min, adding a soln. of 1.6 g 5,7-dichloro-6-(2-chloro-6-fluorophenyl)-1,2,4-triazolo[1,5a]pyrimidine in 10 mL THF, and stirring the whole for

min at -70.degree. gave 0.75 g 5-chloro-7-n-hexyl-6-(2-chloro-6-fluorophenyl)-1,2,4-triazolo[1,5a]pyrimidine (m. 55-57.degree.) which inhibited mycelial growth of Leptosphaeria nodorum with MIC 12.5 .mu.g/mL.

Emulsion and suspension conc., wettable powder and H2O-dispersible granule

formulations contq. I (R1 = cyclohexyl, L1 = L3 = L5 = F, L2 = L4 = H, X

Cl) were given.

IT 214707-02-5

RL: RCT (Reactant)

(amination with N-methyl-2,3-dehydropiperidine; prepn. of 7-alkyltriazolopyrimidines as selective agrochem. fungicides)

RN 214707-02-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,4,6-trifluorophenyl)-(9CI) (CA INDEX NAME)

## IT 238744-91-7

RL: RCT (Reactant)

(condensation with cyclohexylmagnesium bromide; prepn. of

7-alkyltriazolopyrimidines as selective agrochem. fungicides)
RN 238744-91-7 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,6-difluorophenyl)(9CI) (CA INDEX NAME)

(9CI) (CA INDEX NAME)

EP 945453

WO 9948893

L5 ANSWER 4 OF 12 CAPLUS COPYRIGHT 1999 ACS ΑN 1998:708827 CAPLUS DN 129:302657 ΤI Preparation of fungicidal [trifluoromethyl(alkyl)amino]triazolopyrimidines Pees, Klaus-Juergen; Krummel, Guenter; Cotter, Henry Van Tuyl; Rehnig, Annerose; May, Leslie; Pfrengle, Waldemar; Albert, Guido PA American Cyanamid Co., USA SO PCT Int. Appl., 39 pp. CODEN: PIXXD2 DT Patent English LA FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE PΙ WO 9846608 A1 WO 1998-US5615 19981022 19980323 AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9868671 Α1 19981111 AU 1998-68671 19980323

EP 1999-301910

WO 1999-US5915

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

19990312

19990319

19990929

19990930

Α1

IE, SI, LT, LV, FI, RO

Α1

AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TMRW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRAI US 1997-843323 19970414 US 1998-150572 19980910 WO 1998-US5615 19980323 US 1998-160899 19980925 os MARPAT 129:302657 GI

AB The title compds. [I; R1, R2 = H, (un)substituted alk(en)yl, alkynyl, alkadienyl or Ph; Hal = halo; L1-L5 = H, halo, alkyl, alkoxy, NO2], fungicides with selective activity, were prepd. by amination of 5,7-dihalo-6-phenyltriazolopyrimidines with trifluoroalkylamines. The new

Ι

compds. are processed with carriers and adjuvants to fungicidal compns. For example, a stirred mixt. of 1.4 mmol 5,7-dichloro-6-(2-chloro-6-fluorophenyl)-1,2,4-triazolo[1.5a]pyrimidine with 30 mL CH2Cl2 was treated

<

with a mixt. of 4.2 mmol CF3CH2NH2 and 10 mL CH2Cl2 and the whole was stirred for 16 h at ambient temp. to give I (R2 = L2 = L3 = L4 = H, L5 = F) (II; R1 = H, L1 = Cl). II (R1 = Me, L1 = F) (III) inhibited mycelial growth of Alternaria solani and Rhizoctonia solani with MIC 0.78 and 3.13 mg/mL, resp. Emulsion and suspension conc., wettable powder and H2O-dispersible granule formulations contg. III were given.

IT 159331-35-8

RL: RCT (Reactant)

(amination with trifluoroethylamine; prepn. of fungicidal [trifluoromethyl(alkyl)amino]triazolopyrimidines)

RN 159331-35-8 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine,

5,7-dichloro-6-(2-chloro-6-fluorophenyl)(9CI) (CA INDEX NAME)

(SCI) (CA INDEX NAME

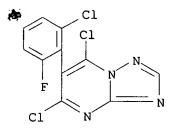
```
L5
     ANSWER 5 OF 12 CAPLUS COPYRIGHT 1999 ACS
AN
     1998:708826 CAPLUS
DN
     129:316233
ΤI
     Preparation of fungicidal (trifluorophenyl)triazolopyrimidines
IN
     Pees, Klaus-jurgen; Albert, Guido
PA
     American Cyanamid Co., USA
SO
     PCT Int. Appl., 39 pp.
     CODEN: PIXXD2
DΤ
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
ΡI
     WO 9846607
                       A1
                            19981022
                                           WO 1998-US5614
                                                             19980323
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
             FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
             GA, GN, ML, MR, NE, SN, TD, TG
     AU 9865768
                       A1
                            19981111
                                          AU 1998-65768
                                                             19980323
PRAI US 1997-843322
                      19970414
     WO 1998-US5614
                      19980323
OS
     MARPAT 129:316233
GI
```

AB I (R1, R2 = H, alkyl, alkenyl, alkynyl, alkadienyl, haloalkyl, aryl, heteroaryl, cycloalkyl, bicycloalkyl, heterocyclyl; R1NR2 = heterocyclic ring; Hal = halo), which show agricultural fungicidal activity, were prepd. E.g., reaction of 5,7-dichloro-6-(2,4,6-trifluorophenyl)-1,2,4triazolo[1,5-a]pyrimidine and Et2NH gave 5-chloro-6-(2,4,6trifluorophenyl)-7-diethylamino-1,2,4-triazolo[1,5-a]pyrimidine. The effectiveness of I as agricultural fungicides was tested. ΙT 214707-02-5 RL: RCT (Reactant) (prepn. of fungicidal (trifluorophenyl)triazolopyrimidines) RN 214707-02-5 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,4,6-trifluorophenyl)-(9CI) (CA INDEX NAME)

Ι

```
AN
     1998:604707 CAPLUS
DN
     129:245161
ΤI
     Process for the preparation of dihaloazolopyrimidines
     Krummel, Gunter; Stumm, Karl-Otto; Pees, Klaus-Jurgen; Liers, Peter Heinz
IN
PΑ
     American Cyanamid Company, USA
SO
     U.S., 8 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                           -----
PΙ
     US 5808066
                       Α
                            19980915
                                           US 1996-729204
                                                             19961015
OS
     CASREACT 129:245161; MARPAT 129:245161
GI
```

The title compds. [I; X1 = Cl, Br; R = (un)substituted Ph, naphthyl, AB etc.] were prepd. by reacting malonic acid ester RCH(CO2R8)CO2R9 [R8, R9 = C1-6 alkyl] with heterocyclylamine such as 3-amino-1,2,4-triazole to form an intermediate salt, which optionally may be acidified to form a dihydroxyazolopyrimidine II, followed by halogenation of the salt or the dihydroxyazolopyrimidine II. ΙT 159331-35-8P RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (process for the prepn. of dihaloazolopyrimidines) RN 159331-35-8 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-chloro-6-fluorophenyl)-



(9CI) (CA INDEX NAME)

L5 ANSWER 7 OF 12 CAPLUS COPYRIGHT 1999 ACS AN 1998:228997 CAPLUS DN 128:257444 ΤI Preparation of pentafluorophenylazolopyrimidines as fungicides ΙN Pees, Klaus-juergen; Liers, Peter; Karla, Cornelia PA American Cyanamid Co., USA so Eur. Pat. Appl., 18 pp. CODEN: EPXXDW DT Patent LA English FAN.CNT 2

	PATENT NO.	KIND DATE	APPLICATION NO. DATE
ΡI	EP 834513	A2 19980408	EP 1997-307813 19971003
	EP 834513	A3 19980603	3
	R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
	IE, SI,	LT, LV, FI, RO	
	US 5817663	A 19981006	US 1996-729704 19961007
	CN 1178792	A 19980415	CN 1997-119259 19970925
	JP 10152489	A2 19980609	JP 1997-284246 19971002
PRAI	US 1996-729704	19961007	
os	CASREACT 128:257	7444; MARPAT 128	3:257444
GI			

$$R^{4}$$
 $R^{1}NR^{2}$ 
 $R^{1}NR^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 

The title compds. [I; R1, R2 = H, (un)substituted alkyl, alkenyl, etc.; R1R2 with the adjacent nitrogen atom = (un)substituted heterocyclyl; R3 = H, halo, NR5R5 (wherein R5, R6 = R1, R2); R4 = H, alkyl, aryl; A = N, CR7 (R7 = R4)] which show selective fungicidal activity, were prepd. Thus, reaction of di-Et malonate with C6F6 in the presence of K2CO3 in DMF followed by treatment of the resulting di-Et pentafluorophenylmalonate with 2-amino-1,2,4-triazole in the presence of Bu3N at 180.degree., halogenation of 5,7-dihydroxy-6-pentafluorophenyl-1,2,4-triazolo[1,5-a]pyrimidine with POCl3, and reaction of

5,7-dichloro-6-pentafluorophenyl-

1,2,4-triazolo[1,5-a]pyrimidine with iPrNH2 in the presence of Et3N in CH2Cl2 afforded I [R1 = H; R2 = iPr; R3 = Cl; R4 = H; A = N] which showed,

e.g., MIC of 1.56 against Pyrenophora teres.

Ι

IT 205253-26-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of pentafluorophenylazolopyrimidines as fungicides)

RN 205253-26-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(pentafluorophenyl)-(9CI) (CA INDEX NAME)

L5 ANSWER 8 OF 12 CAPLUS COPYRIGHT 1999 ACS

AN 1997:402888 CAPLUS

DN 127:17693

TI Process for the preparation of dihaloazolopyrimidines

IN Krummel, Guenther; Stumm, Karl-Otto; Pees, Klaus-Juergen; Liers, Peter Heinz Rudi

PA American Cyanamid Company, USA

Eur. Pat. Appl., 15 pp. CODEN: EPXXDW DTPatent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---- ----\_\_\_\_\_ -----EP 770615 A1 19970502 PΙ EP 1996-307528 19961016 R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE CA 2188905 AΑ 19970428 CA 1996-2188905 19961025 BR 9605258 19980721 BR 1996-5258 19961025 PRAI US 1995-8022 19951027 CASREACT 127:17693; MARPAT 127:17693 GΙ

The title compds. [I; A = B = Cl, Br; R = (un)substituted Ph, naphthyl, etc.; X = CR1, N; Y = CR2, N; Z = CR3, N; R1-R3 = H, (un)substituted C1-6 alkyl; R1R2 = form (un)substituted arom. ring] were prepd. by reacting malonic acid ester RCH(CO2R8)CO2R9 (wherein R8, R9 = C1-6 alkyl) with heterocyclylamine II followed by halogenation of the corresponding dihydroxyazolopyrimidine [I; A = B = OH] or its salt.

IT 159331-35-8P

ć

159331-35-8P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process for the prepn. of dihaloazolopyrimidines)

RN 159331-35-8 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-chloro-6-fluorophenyl)-

(9CI) (CA INDEX NAME)

L5 ANSWER 9 OF 12 CAPLUS COPYRIGHT 1999 ACS

AN 1997:234523 CAPLUS

DN 126:234733

TI Preparation of dihalotriazolopyrimidine derivatives as fungicides

IN Becher, Heinz-manfred; Pees, Klaus-jurgen

PA Shell Internationale Research Maatschappij B.V., Neth.

SO U.S., 9 pp. Cont. of U.S. Ser. No. 424,535. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE

```
US 5612345
                        Α
                             19970318
                                             US 1995-464349
                                                               19950605
     US 5854252
                        Α
                             19981229
                                             US 1995-424535
                                                               19950828
PRAI US 1995-424535
                       19950828
     EP 1993-103464
                       19930304
     WO 1994-EP635
                       19940303
OS
     MARPAT 126:234733
GΙ
```

AB The dihalotriazolopyrimidine derivs. I [R = (un)substituted alkyl, alkoxy, cycloalkyl, aryl, aryloxy or heterocyclyl; Hal = halo] are prepd. as fungicides. ΙT 159331-22-3P 159331-23-4P 159331-25-6P 159331-26-7P 159331-27-8P 159331-28-9P 159331-29-0P 159331-30-3P 159331-31-4P 159331-32-5P 159331-33-6P 159331-34-7P 159331-36-9P 159331-37-0P 159331-38-1P 159331-39-2P 159331-40-5P 159331-41-6P 159331-42-7P 159331-51-8P 159331-52-9P 159331-53-0P 159331-54-1P 159331-56-3P 159331-57-4P 159331-58-5P 159331-59-6P 159331-62-1P 159331-63-2P 159331-64-3P 159331-65-4P 159331-66-5P 159331-69-8P 159331-70-1P 159331-71-2P 159331-72-3P 159331-73-4P 188430-06-0P 188430-07-1P 188430-08-2P RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. as fungicide) RN 159331-22-3 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-23-4 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(2-chlorophenyl)- (9CI)
(CA INDEX NAME)

RN 159331-25-6 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-ethoxyphenyl)- (9CI) (CA INDEX NAME)

159331-26-7 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[4-(phenylmethoxy)phenyl]-(9CI) (CA INDEX NAME)

$$Ph-CH_2-O$$
 $C1$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 

RN 159331-27-8 CAPLUS

[1,2,4] Triazolo[1,5-a] pyrimidine, 5,7-dichloro-6-(2-fluorophenyl)-(9CI)CN (CA INDEX NAME)

<

RN 159331-28-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-29-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-(2-bromophenyl)-5,7-dichloro- (9CI) (CA INDEX NAME)

RN 159331-30-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-(4-bromophenyl)-5,7-dichloro- (9CI) (CA INDEX NAME)

RN 159331-31-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[2-(phenylmethoxy)phenyl]-(9CI) (CA INDEX NAME)

RN 159331-32-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,3-dimethoxyphenyl)-(9CI) (CA INDEX NAME)

RN 159331-33-6 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,4-dichlorophenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & C1 \\ \hline \\ C1 & C1 \\ \hline \\ \end{array}$$

RN 159331-34-7 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-36-9 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-methoxyphenyl)- (9CI)
(CA INDEX NAME)

Ċ

RN 159331-37-0 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[2(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-38-1 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(4-bromophenyl)- (9CI)
(CA INDEX NAME)

RN 159331-40-5 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-[4(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-41-6 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(3-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-42-7 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-51-8 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-(3-bromophenyl)-5,7-dichloro- (9CI) (CA INDEX NAME)

RN 159331-52-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

¢

RN 159331-53-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,3-diethexyphenyl)-(9CI) (CA INDEX NAME)

RN 159331-54-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3,4-dichlorophenyl)-(9CI) (CA INDEX NAME)

$$C1$$
 $C1$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 

RN 159331-56-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3,4,5-trimethoxyphenyl)-(9CI) (CA INDEX NAME)

RN 159331-57-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-methylphenyl)- (9CI) (CA INDEX NAME)

RN 159331-58-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3-chlorophenyl)- (9CI) (CA INDEX NAME)

$$C1$$
 $C1$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 

RN 159331-59-6 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3,4-dimethylphenyl)-(9CI) (CA INDEX NAME)

RN 159331-62-1 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(2-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-63-2 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3-methoxyphenyl)- (9CI)
(CA INDEX NAME)

¢

RN 159331-65-4 CAPLUS
CN Benzenesulfonyl chloride,
2-(5,7-dichloro[1,2,4]triazolo[1,5-a]pyrimidin-6yl)- (9CI) (CA INDEX NAME)

RN 159331-69-8 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-naphthalenyl)- (9CI) (CA INDEX NAME)

RN 159331-70-1 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-fluorophenyl)- (9CI)
(CA INDEX NAME)

RN 159331-71-2 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-phenoxyphenyl)- (9CI)
(CA INDEX NAME)

RN 159331-72-3 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-[1,1'-biphenyl]-4-yl-5,7-dichloro-(9CI) (CA INDEX NAME)

RN 159331-73-4 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3,4-dimethoxyphenyl)-(9CI) (CA INDEX NAME)

RN 188430-06-0 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine,
5,7-dichloro-6-[4'-(1-methylethyl)[1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

RN 188430-07-1 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[4'- - (trifluoromethoxy)[1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

RN 188430-08-2 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-chloro-4-fluorophenyl)-(9CI) (CA INDEX NAME)

L5 ANSWER 10 OF 12 CAPLUS COPYRIGHT 1999 ACS

ΑN 1997:127978 CAPLUS

DN 126:171605

ΤI Preparation of triazolopyrimidines as agrochemical fungicides

ΙN Pees, Klaus Jurgen; Albert, Guido

PA American Cyanamid Company, USA

SO U.S., 23 pp. Cont.-in-part of U.S. Ser. No. 276, 384, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2									
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE					
ΡI	US 5593996	A 1997013	l4 US 1995-412401	19950328					
PRAI	EP 1991-122422	19911230							
	US 1992-998113	19921229							
	US 1994-276384	19940718							
os	MARPAT 126:17160	5							
GI									

AΒ The title compds. [I; R1 = C1-12 alkyl, C2-6 alkenyl, C2-6 alkynyl, etc.; R2 = H, C1-4 alkyl; R1R2 = (un)substituted pyrrolidinyl, piperidinyl, dihydropyridyl; R3 = (un)substituted Ph, naphthyl; R4 = halo, (un) substituted NH2], useful as fungicides, were prepd. Thus, reaction

of 5,7-dichloro-6-(4-methylphenyl)-1,2,4-triazolo[1,5-a]pyrimidine with cyclopentylamine in the presence of Et3N in THF afforded 87% II which showed MIC of 12.5 .mu.g/mL and 1.56 .mu.g/mL against Botrytis cinerea

and

Alternaria solani, resp.

150988-31-1 150988-32-2 159331-35-8 ΙT

RL: RCT (Reactant)

(prepn. of triazolopyrimidines as agrochem. fungicides)

RN 150988-31-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-methylphenyl)- (9CI) (CA INDEX NAME)

RN 150988-32-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-phenyl- (9CI) (CA INDEX NAME)

<

RN 159331-35-8 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-chloro-6-fluorophenyl)-

(9CI) (CA INDEX NAME)

L5ANSWER 11 OF 12 CAPLUS COPYRIGHT 1999 ACS

ΑN 1995:219111 CAPLUS

DN 122:133227

ΤI Preparation of 5,7-dihalo-[1,2,4]triazolo[1,5-a]pyrimidines as fungicides

ΙN Pees, Klaus-Juergen; Becher, Heinz-Manfred

PA Shell Internationale Research Maatschappij B.V., Neth.

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

DATE APPLICATION NO. DATE PATENT NO. KIND \_\_\_\_ 19940303

PΙ WO 9420501 19940915 WO 1994-EP635 Α1

```
AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU,
             JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO,
             RU, SD, SE, SK, UA, US, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     IL 108747
                        Α1
                             19990312
                                            IL 1994-108747
                                                              19940223
     CA 2157293
                        AΑ
                             19940915
                                            CA 1994-2157293
                                                              19940303
     AU 9462580
                        A1
                             19940926
                                            AU 1994-62580
                                                              19940303
     AU 690899
                        B2
                             19980507
                             19941110
     ZA 9401485
                        Α
                                            ZA 1994-1485
                                                              19940303
     BR 9405988
                        Α
                             19951226
                                            BR 1994-5988
                                                              19940303
     EP 699200
                        Α1
                             19960306
                                            EP 1994-909922
                                                              19940303
     EP 699200
                             19971029
                        В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,
SE
     CN 1119015
                        Α
                             19960320
                                            CN 1994-191368
                                                              19940303
     CN 1041927
                        В
                             19990203
     HU 73163
                        A2
                             19960628
                                            HU 1995-1926
                                                              19940303
     JP 08507505
                        T2
                                            JP 1994-519576
                             19960813
                                                              19940303
     AT 159722
                        E
                                            AT 1994-909922
                             19971115
                                                              19940303
     CZ 284158
                        В6
                             19980812
                                            CZ 1995-2233
                                                              19940303
     US 5854252
                        Α
                             19981229
                                            US 1995-424535
                                                              19950828
PRAI EP 1993-103464
                       19930304
     WO 1994-EP635
                       19940303
OS
     MARPAT 122:133227
GI
```

$$\mathbb{N}$$
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{N}$ 

```
AΒ
     Fungicidal 5,7-dihalo-[1,2,4]triazolo[1,5-a]pyrimidines I (R = alkyl,
     alkoxy, etc.; R1, R2 = halo) were disclosed as agrochem. fungicides.
ΙT
     159331-22-3P, 5,7-Dichloro-6-(2-chlorophenyl)-[1,2,4]Triazolo[1,5-
     a) pyrimidine 159331-23-4P, 5,7-Dibromo-6-(2-chlorophenyl)-
     [1,2,4]Triazolo[1,5-a]pyrimidine 159331-25-6P
     159331-26-7P 159331-27-8P 159331-28-9P
     159331-29-0P 159331-30-3P 159331-31-4P
     159331-32-5P 159331-33-6P 159331-34-7P
     159331-35-8P 159331-36-9P 159331-37-0P
     159331-38-1P 159331-39-2P 159331-40-5P
     159331-41-6P 159331-42-7P 159331-51-8P
     159331-52-9P 159331-53-0P 159331-54-1P
     159331-56-3P 159331-57-4P 159331-58-5P
     159331-59-6P 159331-62-1P 159331-63-2P
     159331-64-3P 159331-65-4P 159331-66-5P
     159331-67-6P 159331-68-7P 159331-69-8P
     159331-70-1P 159331-71-2P 159331-72-3P
     159331-73-4P
     RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (prepn. of 5,7-dihalo-[1,2,4]triazolo[1,5-a]pyrimidines agrochem.
        fungicides)
     159331-22-3
RN
                 CAPLUS
CN
     [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-chlorophenyl)- (9CI)
     (CA INDEX NAME)
```

RN 159331-23-4 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-25-6 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-ethoxyphenyl)- (9CI) (CA INDEX NAME)

₹

$$Ph-CH_2-O$$
 $C1$ 
 $N$ 
 $N$ 
 $N$ 

RN 159331-27-8 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-fluorophenyl)- (9CI)
(CA INDEX NAME)

RN 159331-28-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-29-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-(2-bromophenyl)-5,7-dichloro- (9CI) (CA INDEX NAME)

RN 159331-30-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-(4-bromophenyl)-5,7-dichloro- (9CI) (CA INDEX NAME)

RN 159331-31-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine,

5,7-dichloro-6-[2-(phenylmethoxy)phenyl]-

(9CI) (CA INDEX NAME)

RN 159331-33-6 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,4-dichlorophenyl)-(9CI) (CA INDEX NAME)

ζ,

$$\begin{array}{c|c} C1 & C1 \\ \hline \\ C1 & C1 \\ \hline \\ N & N \\ \end{array}$$

RN 159331-34-7 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-36-9 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-methoxyphenyl)- (9CI)
(CA INDEX NAME)

RN 159331-37-0 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-38-1 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(4-bromophenyl)- (9CI) (CA INDEX NAME)

RN 159331-40-5 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-41-6 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(3-fluorophenyl)- (9CI) (CA INDEX NAME)

<

RN 159331-42-7 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-51-8 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-(3-bromophenyl)-5,7-dichloro- (9CI)
(CA INDEX NAME)

RN 159331-52-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

RN 159331-53-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2,3-diethoxyphenyl)-(9CI) (CA INDEX NAME)

RN 159331-54-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3,4-dichlorophenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 \\ \hline \\ C1 \\ \hline \\ C1 \\ \hline \end{array}$$

RN 159331-56-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine,

5,7-dichloro-6-(3,4,5-trimethoxyphenyl)(9CI) (CA INDEX NAME)

RN 159331-58-5 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3-chlorophenyl)- (9CI)
(CA INDEX NAME)

$$C1$$
 $C1$ 
 $N$ 
 $N$ 

RN 159331-59-6 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3,4-dimethylphenyl)-(9CI) (CA INDEX NAME) Ċ

RN 159331-62-1 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-(2-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-63-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 159331-64-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 159331-65-4 CAPLUS

CN Benzenesulfonyl chloride,

2-(5,7-dichloro[1,2,4]triazolo[1,5-a]pyrimidin-6-yl)- (9CI) (CA INDEX NAME)

RN 159331-66-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-68-7 CAPLUS
CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 159331-69-8 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(2-naphthalenyl)- (9CI) (CA INDEX NAME)

RN 159331-70-1 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 159331-71-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 159331-72-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-[1,1'-biphenyl]-4-yl-5,7-dichloro-(9CI) (CA INDEX NAME)

RN 159331-73-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(3,4-dimethoxyphenyl)-(9CI) (CA INDEX NAME)

- L5 ANSWER 12 OF 12 CAPLUS COPYRIGHT 1999 ACS
- AN 1993:671190 CAPLUS
- DN 119:271190
- TI Triazolopyrimidine derivatives with fungicidal activity
- IN Pees, Klaus Juergen; Albert, Guido
- PA Shell Internationale Research Maatschappij B. V., Neth.
- SO Eur. Pat. Appl., 38 pp. CODEN: EPXXDW
- DT Patent
- LA English

	PATENT NO.	KIND DATE		APPLICATION NO.	DATE			
PI	EP 550113 EP 550113 EP 550113	A2 1993070 A3 1993080 B1 1997103	)7 )4 .5	EP 1992-204097				
	AU 9230435 AU 667204 BR 9205172 ZA 9210043 CN 1075144 CN 1033643 HU 63305 JP 05271234 PL 171579 EP 782997	A1 1993070 B2 1996033 A 1993070 A 1993072 A 1993083 B 1996122 A2 1993083 A2 1993103 B1 1997053 A2 1997070	1 4 6 8 1 1 5 0 9	GB, GR, IE, IT, LI, AU 1992-30435  BR 1992-5172 ZA 1992-10043 CN 1992-115232  HU 1992-4135 JP 1992-358632 PL 1992-312883 EP 1997-105710	19921224 19921228 19921228 19921228 19921228 19921228 19921228			
	IL 104244 RU 2089552 AT 159256 ES 2108727 PL 174047	CH, DE, DK, ES A1 1997077 C1 1997093 E 1997117 T3 1998016 B1 1998063 AA 1993076 A 1997012 19911230 19921228	FR, 3 0 5	GB, GR, IE, IT, LI, IL 1992-104244 RU 1992-16218 AT 1992-204097 ES 1992-204097 PL 1992-297160 CA 1992-2086404 CN 1996-103723	19921228 19921228 19921228 19921228 19921228			

```
AB Amination of triazolopyrimidine derivs. I [R, R4 = halo; R3 = (un)substituted aryl] with amines HNR1R2 [R1 = (un)substituted alkyl, alkenyl, alkynyl, alkadienyl, cycloalkyl, bicycloalkyl, heterocyclyl; R2 H, alkyl; or NR1R2 = (un)substituted heterocyclyl] and optional
```

subsequent reaction(s) give claimed title compds. I [R = NR1R2, R1-R3 = same, R4 = H,

halo, (un) substituted amino], useful as fungicides. Apple cuttings of the

variety Morgenduft, (6 wk old) were treated with a soln. of test compd. I (R = cyclopentylamino, R3 = Ph, R4 = Br) at 400 ppm in water/acetone/Triton X or water/methanol/Triton X. After 24 h., the plants were infected with Venturia inaequalis (about 50,000 conidia/mL), and after incubation for 14 days showed no infection.

IT 150988-31-1, 5,7-Dichloro-6-(4-methylphenyl)-1,2,4-triazolo[1,5-a]pyrimidine 150988-32-2, 5,7-Dibromo-6-phenyl-1,2,4-triazolo[1,5-a]pyrimidine

RL: RCT (Reactant)

(amination of, in prepn. of fungicide)

RN 150988-31-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dichloro-6-(4-methylphenyl)- (9CI) (CA INDEX NAME)

RN 150988-32-2 CAPLUS CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5,7-dibromo-6-phenyl- (9CI) (CA INDEX NAME)